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SMALL BUT POTENT: THE ROYAL MALAYSIAN NAVY STRATEGIES TOWARDS SUPERIOR NAVY AGGRESSION

by

Syed Muhammad Shafiq

Lt Cdr Royal Malaysian Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the paper requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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thus jeopardizing Malaysia's sovereignty and its maritime interests. The need to protect itself from external aggression with its military force is mandatory and it must go hand-in-hand with highly							
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Malaysian Navy (RMN) force to thwart any aggressive behavior from superior navies. This paper							
defines such approaches at the operational level and how it can affect the enemy within its operational factors. It explains how the RMN can exploit its strength and conceal its weaknesses in							
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Introduction

As a small and developing nation, Malaysia aims to maintain its relevancy in international relations, particularly when it involves the U.S. and China by being neutral and not coerced while maintaining open foreign policy. While a small and humble naval force, the Royal Malaysian Navy (RMN) has the capability to challenge the great navies who intent to conduct maritime offensive operations toward Malaysia maritime interests and sovereignty. With its clear and feasible mission statement, the RMN, though with a modest budget, is able to challenge superior navies by implementing strategies favorable to them. The first strategy is by adopting a sea-denial strategy. This asymmetrical strategy is vital in searching for comparative advantages while trying to avoid a decisive and stalemate battle with a superior navy. The second strategy is by implementing its 15to5 Fleet Transformation Program. This innovative program will enable the RMN to gain initiatives and advantages such as commonality, advanced weaponry and self-reliance. The commonality will ensure the principle of simplicity within its force while self-reliance will drive the RMN survivability in naval warfare. The third strategy is the RMN's capability in performing joint operations with its sister service, the Royal Malaysian Air Force (RMAF), particularly in maritime strike operations. The RMAF, with its fleet of potent and lethal Fighter Ground Attack (FGA) from various manufacturers, are capable of delivering deadly maritime strike which adds a value of missile strike option to the naval force. The scattered location of its airfields, both on the main lands and small islands, potentially brings the element of surprise attack and will further challenge its adversary. By implementing a sea denial strategy combined with innovations and integrated joint operations, the RMN can pose an asymmetric challenge to stronger navies that may threaten Malaysia's maritime resources and interests.

Background

Malaysia is a maritime nation. Malaysia is geo-strategically located in the middle of the world trading hub and is dependent on seaborne trade which contributes to ninety percent of its economy. This factor is obvious whereby Malaysia is located between one of the world's busiest straits, the Straits of Malacca and one of the disputed seas, the South China Sea (SCS). The Straits of Malacca is the main artery for world trade whereby 100,000 vessels ply through this strait every year while it is estimated that 15.2 million barrels of crude oil pass through the SCS per day via the Malacca Straits.² Furthermore, the SCS provides the main source of protein to the people of Southeast Asia and its richness in hydrocarbon contributes to the development of Malaysia's economy. A second factor can be seen whereby ninety percent of Malaysia's trade is a seaborne trade which has served seven international ports scattered throughout Malaysia.3 Realizing that seaborne trade is her economic life blood, Malaysia has taken the initiative in setting up its commercial shipping liner known as Malaysia International Shipping Corporation (MISC), which has grown into one of the world's largest shipping operators and the second largest shipping company in the world by market capitalization. 4 These factors show that Malaysia is a maritime nation and its importance has attracted attention from various great powers who intend to exert their influence in the region.

Among the regional powers, China has expressed its interest in the region, and this can be traced back to the ancient Ming dynasty in the 14th century. Admiral Zheng He, a Chinese admiral, led an expedition to expand the dynasty trade to Southeast Asia and other empires around the Indian Ocean. This expedition was known as peace and friendship with the purpose to establish diplomacy and trade. The convoy consisted between 50 and 250 ships with 20,000 armed troops.⁵ A few analysts argue that this expedition was to exert gunboat diplomacy

whereby the Chinese admiral further established a garrison in Malacca to control the Malacca Straits in 1405. Contemporarily, this interest was expressed in 2013 by former President of the Republic of China (PRC), Hu Jintao, whereby he expressed the importance of the control of the Malacca Straits in his "Malacca Dilemma" thinking. He stressed the importance of ensuring the uninterrupted flow of raw materials from the Persian Gulf and Africa to feed the industrial hunger in Mainland China. The PRC interest in Malaysia's surrounding waters has been furthered evident whereby it has strengthened its nine-dash line claim in the SCS on a historical basis. The claim was observed as a unilateral move and was further worsened with reclaiming activities by China with the installment of lethal and offensive characteristics of military assets. This move can be assessed as a two-fold strategy: Anti Access and Area Denial (A2AD) asymmetric strategy against superior U.S. Navy (USN) and local sea control strategy against claimants which pose little threat to the People Liberation Army-Navy (PLA-N). In addition, PLA-N military activity has become a powerful driver whereby an increment of the USN and other modern navies' presence in these waters has increased to challenge China's claim.

The increment of modern navies' presence in these waters potentially creates friction and this view was supported by the naval analyst, Professor Holmes and Yoshihara from the U.S.

Naval War College (USNWC). Both observed the effect of a cramped space on the western

Pacific coastline and with other geo-strategic considerations, it is unlikely for the two world class powers to be contained and confined within the first island chain.⁸ Additionally, the U.S. consistency in pursuing its Freedom of Navigation Operations (FONOPS) since 1979 has not been widely accepted by certain nations as they view this as a modern gunboat diplomacy.⁹ This operation which frequently occurs in the South China Sea, aiming at the PLA-N, has had sometimes had a significant affect on other stakeholders like Malaysia. The risk of

miscalculation and provocations may result as these two great navies encounter each other within the narrow seas of Malaysia's contiguous zone and Exclusive Economic Zone (EEZ). This, directly and indirectly, exposes Malaysia's frontier which in turn threatens its sovereignty. Kuala Lumpur has increased its suspicion over the increment of Beijing and Washington D.C military presence and related activities within its EEZ. Shall conflict arise, the risk to Malaysia and its neighboring frontiers may become the area of conflict thus affecting Malaysia's economy and foreign policy. Thus, it is imperative for Malaysia to understand the need to gain protection from external attack which is feasible through military force and goes hand-in-hand with highly trained diplomacy.¹⁰

#1. Sea-denial strategy.

The RMN can adopt a sea denial strategy to mitigate the gap of force and space factor to challenge superior navies within its waters. This strategy has been chosen by smaller navies to challenge and dispute command of superior navies whose intent to exercise sea control. The idea of implementing a sea denial strategy for the small navy was supported by naval thinkers stating that the small and coastal navy does not have to be a sea power in exercising its role and mission within its domain. This strategy has been chosen mostly by smaller coastal navies with limited defense budgets whereby the nation's economy dictates the budget and development. The RMN can be grouped under this category whereby its development has increased gradually in parallel with its national economic status. 13

Sea denial can be defined as the ability of one's navy to deny the use of the sea partially or completely by the enemy for military and commercial purpose.¹⁴ Although the great naval thinker Milan Vego stated that this is the principal objective of the inferior navies,¹⁵ it is arguable

that this strategy can be adopted by a great navyas well, depending on the situation.

Nevertheless, the RMN, in this context as the inferior navy, may exert this strategy with several methods which suit its current capabilities and its domain. The methodologies that RMN can implement are avoiding decisive naval battles and control of one or multiple choke points.

Avoiding a decisive naval battle is vital for the RMN, ensuring its fleet is active in being until the situation develops or is favorable on her side. One of the pre-requisites for the superior navy to exercise sea control is through the destruction of the inferior force via decisive battle. ¹⁶ The stronger navy enjoys several initiatives of operational factors and functions such as the initiative in selecting the time to initiate an attack and greater firepower from a stand-off distance, beyond the effective range of the RMN defense. ¹⁷ Furthermore, a lethal attack can be launched against the RMN bases. Shall this situation happen, the RMN will lose its capability to contest the superior navy. Thus, to avoid being defeated, the RMN must actively anticipate its potential enemy activities. Operationally, this is possible via the operational function of intelligence and sound tactical of scouting.

Scouting is important as it contributes to the effective attack. ¹⁸ As a small naval force with a modest budget, the RMN must strictly adhere to one of the principles of war, the economy of force. The RMN is constrained by its amount of ammunition, particularly missiles and torpedoes. Therefore, its attack must be precise and lethal. Thus, the targeting information and precision are prerequisite to launch an attack, and this is possible with excellent scouting. To implement good scouting, the RMN enjoys the advantages of operational factors in term of space whereby the helpful geography such as the narrow Straits of Malacca and the South China Sea are favorable for them. Its shorter distance to its coast will enable the various radar and observation stations to better conduct surveillance and reconnaissance particularly in the

Recognized Maritime Picture (RMP). Furthermore, by exploiting and taking advantage of the high traffic density, the RMN can deploy its small naval force to disguise itself as a neutral vessel, or it may deploy another unsuspected vessel such as a fishing vessel to provide continuous intelligence and targeting information. This tactical action if implemented in a wide area will lead to another element, superior domain awareness. These two elements; geography and superior domain awareness are a few elements of success in naval defense whereby it will assist the RMN in avoiding decisive naval battles that may result in a force fatality.

Another method of sea denial is the denial of control of one or multiple choke points. This method suits the RMN strategy considering its current capabilities and the geographical factors which are favorable to her. The superior navy will ensure the control of various choke points within Malaysian frontiers such as the northern approach to Malacca Straits and approaches from and to the SCS. These will become pre-requisites to obtain sea control.²⁰ The control of choke points will also blockade RMN naval force movement within certain areas thus preventing the RMN to conduct sea-denial strategy. Furthermore, this action can be carried out by the superior navy with various high-capable assets such as larger combatants, submarines, mines and aircraft. Most of the great navy assets are superior with regards to range, speed, precision and lethality thus capable of becoming the most effective platforms in conducting the struggle for the control of multiple choke points. Once sea control is established, the superior navy will have the capability to conduct other phases of maritime activities such as shore-projection without being a contested.

With sea denial strategy in mind, the RMN forces must contest and deny the control of its choke point. This strategy can be carried out with several asymmetrical methods. One of the asymmetrical methods is by exploiting its comparative advantage whereby the RMN can exploit

its strength and enemy's weaknesses.²¹ The comparative advantages that the RMN can consider is the usage of its conventional powered submarine force. The submarine is a classic sea denial weapon and has become the weapon of choice for this purpose. The RMN submarine will exploit its advantages: subsurface capabilities, quietness compared to nuclear powered submarines and having the local knowledge of its operating environment.²² The submarine stealth characteristic is vital as it needs to operate independently for a certain period in the waters dominated by the enemy without being detected. Furthermore, with the combination of its stealth and destructive potential, submarine presence will create uncertainty and deny the enemy's intention to control a certain area.

In addition, the oceanography characteristics of littoral waters will add complexity and variability affecting the underwater sensor effectiveness. ²³ Thus, more efforts are required to detect submarines which will affect the operational factors of space and time. Another factor that potentially creates difficulty and influences the decision making in ASW is the identification of submarines whereby it is difficult and almost impossible to identify the type and nationality of one's submarine particularly when it's submerged. The increased presence of a submarine in this region may contribute to this factor whereby the surrounding navies have acquired conventional powered submarines. The possibility of misjudging and misidentify of an RMN submarine with another navies' submarine may exist, and if it happens, the situation may change and become complicated. The superior navy may release it ASW weapon indiscriminately to protect its naval force as what the Royal Navy did in the Falkland War whereby it fired hundreds of ASW weapons against one Argentine submarine. ²⁴ The presence of single submarine may pose a major threat to control of the sea by a stronger fleet and deny its operation in the area.

Besides submarines, the sea mine is another weapon of choice for denial of choke point control. It has frequently been chosen by inferior navies because it is simple, reliable, lethal and can be deployed by any platform.²⁵ In a contest against a superior navy, the RMN as the inferior navy can conduct offensive mining in the bottle neck area or choke point control as the first step for them to exert sea control. Additionally, the RMN will lay mines in its seaport and its surrounding waters as part of defensive mining to prevent the enemy from conducting a blockade. This will assist in encountering the enemy's strategy in search for a decisive naval battle. Furthermore, it serves as anti-amphibious defense shall enemy intent to conduct shore projection. Once a certain area has been mined, its opponent will face the challenge of operational factors in terms of time, space and force. The Mine Counter Measure (MCM) environment is complex and requires substantial and enormous effort to hunt and neutralize almost all types of mines. The peculiarities of bathymetry and peculiar oceanography, sound propagation, characters of the sea bottom and the sensitivity of the sensor used to detect mine are some of the challenges in term of space and force.²⁶ This will affect the operational decision of a superior fleet who intends to control the Malaysia water for its usage.

Although small, the RMN can deliver a heavy blow towards the superior navy by comprehending and executing naval theorist Wayne Hughes, Key Cornerstones presented in Fleet Tactics: Attack Effectively First. The RMN need to continuously look for its own comparative advantage and look for the enemy's weaknesses and its critical vulnerabilities. This approach can be refined whereby the RMN can make a skillful combination of geographic position and its asymmetric assets such as the submarine, mines and naval missiles to deliver an impactful strike in narrow seas environment.²⁷ It is imperative for the RMN to attack effectively first under concentrated firepower and this effort can be carried out by a tactical attack.

Successful tactical attacks also require the element of a surprise, thus it is important for the RMN to invest and innovate on superior scouting. All the tactical success is achievable when the implementation of attack effectively first can be translated into the operational objective of the RMN. This operational objective will contribute to the political objective of Malaysia, and it will support its strategic objective of ending the war with help from the international bodies portraying themselves as a small nation being bullied by a bigger and stronger nation.

#2 Implementation of Innovative 15-to-5 Fleet Transformation Program

Being small does not mean an absence of big ideas. The RMN decision to implement its innovative program known as 15-to-5 Fleet Transformation Program is the best approach to address various challenges in the backdrop of Malaysia's economic constraint. The fiscal challenge is the biggest difficulty in which the RMN has to face, and it worsened with the recent cut in the defense budget by 30 percent.²⁸ Realizing the increasing need for the RMN to play its role with very limited allocation, the RMN need to become very flexible and adaptive to a fast-changing dynamic shift in the security environment. Its 15-to-5 Fleet Transformation Program, an out-of-the box approach, will take advantage of expanding its mission spectrum and enhancing its capabilities²⁹. This enhancement of its capabilities is feasible through the incremental number of fleets with commonality characteristics and self-reliance.

By implementing this idea, the RMN will benefit from the increasing number of fleets with commonality features without affecting the original budget allocated to the RMN. This is possible whereby the RMN will reduce its 15 classes of ships from various manufacturers to 5 classes of ships, built mostly by local shipyards. The reduction is via decommissioning of aging

and obsolete assets. This will save on maintenance costs, allowing budgets allocated for the maintenance to be optimized for procurement of new assets. The procurement of newer ships will emphasize commonality as one of the priority features and this will assist the RMN to better conduct its role to fight a war. Commonality features will contribute to the war effort by sharing necessary information and equipment thus obtaining one of the elements in the principles of war; simplicity.

The element of simplicity is crucial for a small navy. The RMN can derive this element from the commonality features of its fleets which will assist them to be concise, accurate and flexible in its planning, execution and decision making. For instance, the commonality features of its fleet sensors will contribute to interoperability thus gaining the benefit of information sharing via the fastest means. The important information, such as targeting information, will enable them to attack effectively first, especially when the attack is carried out in the area when the enemy is least expected.³⁰ Furthermore, through synchronization and sequencing of maritime attack, and with the combination of the surprise element, the small RMN's fleet is capable of delivering a heavy punch to superior force. As the enemy responds towards the attack, the RMN fleet can initiate another attack at other places to create confusion and leave them in chaos. The creation of another attack is possible with the number of assets in which it will disperse to create a better chance in the probability of kill.³¹ Simplicity through commonality will assist the RMN naval force to contest a superior navy and address its gap in the force element of the operational factors. In addition, simplicity will also assist in the elimination or reduction of friction and fog of war. This is possible through a very simple organizational structure and flexible planning. Thus, it is obvious that the simplicity element which is derived from this program will assist the RMN in contesting any superior navy.

This innovative program will potentially exploit another advantage, self-reliance. Selfreliance is instrumental for a smaller navy like the RMN. This will assist them with achieving two factors: ensuring the RMN's momentum to contest superior force independently and strengthening local shipyards and defense industry. In wartime, due to the vulnerability of Malaysia's long coastline and the gap distance from Peninsular Malaysia to East Malaysia, its seaborne trades are likely to be harassed by any superior force in maritime trade warfare. With the implementation of minimal adversary naval action such as a naval blockade, various Malaysian local industries, including the defense industry, will suffer from the act whereby Malaysian imports and exports will be disrupted and potentially embargoed. Any foreign assistance to Malaysia is unlikely and the RMN will have to fight with whatever assets it owns as well as face the risk of attrition as the war goes on. It can be predicted that relying on foreign states for the procurement of defense assets, the RMN will probably lose its self-reliance.³² This situation will worsen if foreign states have an aggressive agenda or place their interests above the RMN's need. Furthermore, through self-reliance, the local industry will minimize this possibility by actively engaging in shipbuilding activity and other defense related matters during peacetime and wartime. The implementation of this program requires engagement with various local shipyards and defense industry. The plan will result in not only limited to shipbuilding but also the development of a various high-technological system such as weapon systems. In addition, the shipbuilding project will contribute towards Malaysia's macro and microeconomic strength such as assisting and sustaining in the growth of local defense industry, reduce the outflow of funds overseas and creation of new jobs.

#3 Joint Operations with the Royal Malaysian Air Force (RMAF)

In addition to the sea-denial strategy and the implementation of its transformation program, the RMN should ramp up a joint coordination effort. A joint effort and close service cooperation are significant to winning a war. Vego argues that to obtain sea control, one force must obtain control of all three physical dimensions and part of the coast. He further emphasizes the importance of both the air force and naval force join efforts to exercise sea control particularly in narrow seas such as the Malacca Straits and certain parts in the SCS. The superior force, with its greater capabilities, own the initiative and certain advantages to exert sea control. Thus, it is imperative for the inferior force such as the RMAF and the RMN to contest and dispute both the air and sea domain. This is possible through coordinated joint operations with the RMAF particularly from its FGA which is based in the scattered location of its airfields.

Contemporarily, coordinated joint operations are one of the modern warfare elements being pursued by military force. The employment of diverse forces to reach a common objective at all levels will exploit the strength of one's force and this is possible by an inferior force too. The objective of the inferior force is to disrupt the enemy's freedom of action and movement via continuous attack and harassment. The RMN and the RMAF are capable of performing this action. They are interoperable and this is evident in their long established mutual understanding for coordinated joint operations as demonstrated with a series of past successful operations and exercises. A Local exercises between the RMN and the RMAF such as Operational Sea Training Exercise (OSTEX) and ANGSA Exercise which being held annually have sharpened the coordination between these two services. These exercises have emphasized the high-tech capabilities of the forces involved such as coordinated missile firing (CMF) and Integrated Air Defense. The focus of this exercise on missile firing capability is imperative. This is because the

smaller navy must deliver a heavy casualty in one attack and the missile is the best in this role as it is fast, lethal and offensive in nature.

Moreover, the RMN and the RMAF must make full use of its missiles effectively and efficiently. Due to limitations in missile quantity inventories, both services have taken seriously one of the important elements of the principles of war: economy of force. It is unlikely for them to overwhelm the enemy with a missile attack, thus, precision in every missile attack is mandatory and this is possible with a coordinated method of continuous joint exercise and operations. Both services have shown its excellent standard in these capabilities. Additionally, the cost of one missile is cheaper, and it is expendable, compared to the cost of a surface asset such as frigate and destroyer. Most importantly, the missile attack will deliver a high cost to the enemy, particularly to his High Value Unit (HVU). Furthermore, it takes more time to produce a ship with competent crews to fight a battle; this will greatly affect the adversary's operational factors of force, its operational regeneration and operational reserve.

Realizing the missile's susceptibility of being influenced with the electronic jamming, the RMN and RMAF have had various type of missiles in its inventory from western nations and former Soviet-Union bloc. The owning of various type of missiles will challenge the adversary to understand a certain type of missile profile, thus force and complicate their approach for defense counter-measure. The RMAF particularly is familiar with various avionic and weapon systems and has adjusted and adapted appropriately to meet its special needs to suit its environment.³⁷

The scattered location of the RMAF airfields in Malaysia's geography can pose a significant challenge to its adversary too. In modern day, a fort in narrow seas can be described as a land-based aircraft and coastal batteries which potentially deliver a lethal strike against enemy's fleet. The scattered location of its airfields, which varies from deep in the jungle to

nearby coastal areas, will complicate and challenge the enemy to anticipate the threat axis of the missile attack from the RMAF's FGA. The airfields' location deep in the jungle and in the mountainous areas provide good shelter and concealment from enemy attack, thus the RMAF may sustain its operations without being disrupted by enemy harassment. Thus, joint operations with the RMAF will complicate and deny the enemy's intent to exert sea control in Malaysia's waters and enable the RMN to protect Malaysia's maritime resources and interests.

Counter Argument

Some would argue that, regardless of the RMN strategies, as a small navy with limited capabilities and number of assets, the RMN will be defeated in any naval engagement with the superior force. The adversary capabilities, particularly in the number and size of surface assets, the superior air power, and sustainability will overwhelm the RMN capability to defend itself. The mass number of surface fleets and air assets with high tech equipment, such as sensors and weapon systems, will deliver the stand-off capability owned by the superior force which will knock out the RMN assets even before the RMN can begin its detection phase. Furthermore, the stand-off capability will further guarantee the enemy's power projection towards Malaysian mainland. In addition, the enemy, with its superior capabilities, will exert sea control in Malaysia's waters thus strangling Malaysia's economy in which ninety of its trade is seaborne trade. This effort will deny Malaysia the resources of seaborne trade, thus crippling its economy which in turn unable them to sustain and survive the war effort. The RMN's approach to conduct the sea-denial strategy will not bring any effect as the RMN assets are small, inferior and vulnerable to neutralization by the enemy.

Rebuttal

Although the RMN capability is inferior vis-à-vis superior navy, its geographic position gives Malaysia unique opportunity to implement this asymmetric strategy. This geographic position provides the RMN with certain advantages in terms of operational factors such as space and time. The Malaysian geographies are unique whereby its long peninsular coastline, scattered small islands and variable topographies will present significant challenges to its adversary. In addition, due to the variable topographies and geographic features, the enemy will face the difficulty to build its air and maritime picture. This difficulty will complicate and limit the adversary's sensors and weapons maximum effective range. This will further disrupt the enemy's layered defense, defense in depth and necessary mutual support, thus exposing its vulnerability to being attacked. Furthermore, due to the proximity with the land, various RMN and RMAF assets such as small size combatants and FGA may exploit the short distance and topographic features to launch a surprise attack against the enemy's fleet particularly in choke points areas which will deny the enemy sufficient time to counter the threat. In short, the RMN and the RMAF have the advantage of time and space whereby it may choose when and where to strike. This combination of initiative and surprise will contribute to the attack effectively first cornerstone of naval tactics, which is the critical element for the inferior force. Furthermore, if the RMAF can sustain a continuous air attack, it will potentially attrite down the enemy and shows its efficacy if the attack is carried out against the enemy's critical vulnerabilities. In the Falkland War, if the Argentine Air Force could have prolonged a constant air attack against the Royal Navy (RN), the history of this war would be different. This history would be more interesting if the Argentinian Navy and the Argentinian Air Force had conducted joint operations

against the RN. Thus, by a thorough study and learning from this lesson, the RMN is capable of protecting Malaysia's maritime resources and interests against any superior aggression.

Conclusion

The RMN, although inferior, is capable of challenging any great navy threatening its maritime resources and interests with strategies favorable to them. This is possible with the implementation of the asymmetric strategy by forcing the enemy to fight with strategy unfavorable to them. This will exploit the RMN strengths and simultaneously conceal its weaknesses. On the other hand, the enemy will be forced to adapt to the RMN strategy, thus exposing its vulnerabilities and weaknesses. The RMN with a sea-denial strategy in mind will implement its fleet-in-being strategy. This is vital and possible through the avoidance of decisive naval battles. The continuous existence of its fleet will ensure the RMN capable to continuously harass the enemy thus dispute and contest the enemy's intention to exert sea-control in Malaysia's waters. The innovative approach of its 15-to-5 Fleet Transformation Program is vital whereby this program assists the RMN to become very flexible and adaptive to the current environment thus maintaining its relevancy and survivability in peace and wartime. This program also ensures the RMN develops its current assets regardless of Malaysia's economic fluctuation. Finally, joint operations with the RMAF are vital to deliver a punishing attack to the enemy and complicate the enemy's ability to conduct its power projection into Malaysia's waters and the mainland. In conclusion, with the implementation of these three strategies, the RMN is fully capable of challenging great navies of today and tomorrow, thus protecting its maritime resources and interests.

Notes

³ http://www.mida.gov.my/home/developed-infrastructure/posts/assesed 14 Apr 2018.

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- ¹⁰ Rear Admiral Bradley A.Fiske, *The Navy as A Fighting Machine* (New York: Harvard College Library, 1916), 17, Digitized by Google.
- ¹¹ Capt Wayne Hughes Jr. *Fleet Tactics and Coastal Combat*. (Annapolis, Maryland. Naval Institute Press, 2000), 10, 255 and 256.
- ¹² Joseph R Morgan, *Porpoises Among the Whales: Small Navies in Asia and the Pacific*. (Honolulu, Hawaii: East-West Center, 1994),7.
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- ¹⁴ Vego, "The Objectives of Naval Warfare,"12.
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- ²¹ Michael I Handel, Masters of War: Classical Strategic Thought. (Great Britain, 2001), 111.
- ²² Murshid Al-Hafiz," Exclusive Interview: Datuk Seri Hishammuddin Hussein, Minister of Defence, Malaysia," *Asian Defense Journal*, Mac 2017, 10.

²³ Vego, "The Objectives of Naval Warfare," 9.

²⁴ Capt Wayne Hughes Jr. Fleet Tactics and Coastal Combat, 262.

²⁵ Vego, "The Objectives of Naval Warfare," 9.

²⁶ Vego, "Fundamentals of Naval Mine Countermeasures (MCM)," 2 and 3.

²⁷ Geoffrey Till and Jan Chan, *Introduction: Naval Modernization in South-east Asia: Nature: cause and consequence* (United Kingdom: Oxford, 2014), 11.

²⁸ Dr Lee Willett, "Malaysian Fleet Transformation Seeks to Increase Numbers, Capability," *Jane's Defence Weekly* no.1 /2017 (26 Jan 2017): accessed May 1, 2018, http://janes.ihs.com/DefenceWeekly/DisplayFile/jdw64474?edition=2017

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² Ian Storey and Chen-Yi Lin, *The South China Sea Dispute: Navigating Diplomatic and Strategic Tension* (Singapore: ISEAS, 2016), 3 and 4.

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